M. LEARY.
Loom-Shuttle.

No. 211,243. Patented Jan. 7, 1879.

Fig. 1.

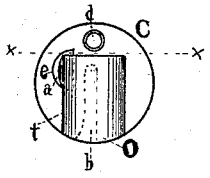

Fig. 2.

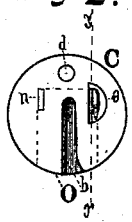

Fig. 3.

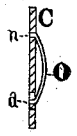

Fig. 4.

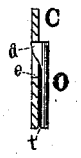

Fig. 5.

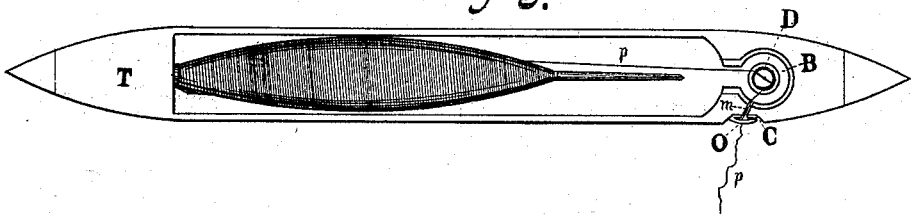

Fig. 6.

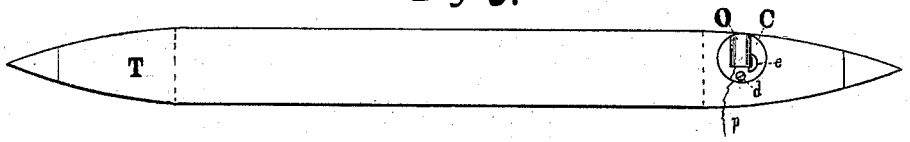

Fig. 7.

Witnesses
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Inventor:
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UNITED STATES PATENT OFFICE.

MICHAEL LEARY, OF THREE RIVERS, MASSACHUSETTS.

IMPROVEMENT IN LOOM-SHUTTLES.

Specification forming part of Letters Patent No. **211,243**, dated January 7, 1879; application filed August 19, 1878.

To all whom it may concern:

Be it known that I, MICHAEL LEARY, of Three Rivers, county of Hampden, and Commonwealth of Massachusetts, have invented new and useful Improvements in Loom-Shuttles, of which the following is a specification:

This invention relates to means for threading an ordinary shuttle.

Heretofore the thread has most commonly been fed from the spool directly to the eyelet. This has been found objectionable, as a constant wear is had on the side of the eyelet nearest the spool, making it uneven, and thus affecting the tension. Heretofore, also, the thread has commonly been drawn through the eyelet by the operator placing his mouth over the eyelet-hole and sucking the thread through. This is very objectionable, first, because the eyelet-hole becomes filled with dust and lint in the effort to draw the thread through, and this is drawn into the mouth and lungs, being a frequent cause of disease, besides being a disagreeable operation. The shuttle also often becomes besmeared with tobacco-juice from the mouth of one operative, making the threading operation disgusting when this shuttle comes to the hands of another. Second, because of the loss of time; and, third, these holes are lined with clay tubing, which is easily broken, causing expense of repair.

The object of my invention is to produce a shuttle which has none of the above objectionable features, one that can be threaded in an instant by a motion of the hand, and that will not be easily gotten out of repair.

The invention consists in the arrangement in a shuttle of a pin over which the thread passes, and in the metal eyelet with slot and cover, and in the arrangement of the same in an ordinary shuttle.

In the accompanying drawing, in which similar letters of reference indicate like parts, Figure 1 is a top view of the threader. Fig. 2 is a view of the lower side. Fig. 3 is an edge view, in section, through dotted line *x x*, Fig. 1, of part below the line. Fig. 4 is an edge view, in section, through dotted line *y y*, Fig. 2, of part on left of line. Fig. 5 is a side view of a shuttle, with the device attached. Fig. 6 is a top view of the same, and Fig. 7 is a view of the screw or pin over or around which the thread passes.

The construction of the wood part of the shuttle is the same as in the old style, except the eyelet end, in which the opening B (see Fig. 5) is made large enough to take in pin D. On the top a recess is made deep enough to bring the top of the threader, when placed therein, flush with the top of the shuttle-block. Directly below the slot *b* in threader (see Fig. 2) I make the cut *m*. (See Fig. 5.) The threader is held in place by a screw or its equivalent.

I make disk C with slot and opening, as seen in Fig. 2. The lap or top piece O has tongue *n*, which passes through the hole, as seen, and is riveted to hold the piece O in place; or this piece may be soldered to the disk at one side. The piece O has also the projection *a*, which passes through the opening *e* and prevents the return of the thread. Fig. 4 shows the shape of this projection, it being beveled on one side to allow of the passage of the thread, and straight on the other to prevent its return.

The tension is changed by varying the length of the slot *b* and height of the piece O. If the slot *b* is made shorter the tension is increased, or if the piece O is drawn closer to disk C the same result is obtained.

In threading the shuttle the thread P (see Fig. 5) is drawn taut, and held close to the shuttle just above pin D. This projects high enough to catch the thread when so placed. The thread is then drawn into slot *m* and under piece O, allowing it to unwind from the bobbin at the same time. The threading may be done with a single circular motion.

This device may be placed on any ordinary shuttle by making the changes stated.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination of the shuttle, provided with pin D and slot *m*, with the threader, consisting of plate C, having slots *b* and *e*, and piece O, having projection *a*, substantially as set forth.

2. The piece or plate C, provided with the slots *b* and *e*, and piece O, having projection *a*, in combination with a shuttle-block provided with a slotted thread or delivery eye, substantially as shown.

MICHAEL LEARY.

Witnesses:
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